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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,082	08/16/2000	Kazuhito Ohashi	35.C14706	3066

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EXAMINER	
AGGARWAL, YOGESH K	

ART UNIT	PAPER NUMBER
2615	9

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/639,082	OHASHI, KAZUHITO	
	Examiner	Art Unit	
	Yogesh K Aggarwal	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/12/2004(Telephonic interview)*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,30 and 33* is/are pending in the application.

4a) Of the above claim(s) *10-29,31,32 and 34-36* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,30,33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 August 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7,8*.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *10*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Interview Summary	Application No.	Applicant(s)	
	09/639,082	OHASHI, KAZUHITO	
	Examiner	Art Unit	
	Yogesh K Aggarwal	2615	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Yogesh K Aggarwal*. (3)_____.

(2) *Mr. Diperna (Reg. no. 44,063)*. (4)_____.

Date of Interview: *04/12/2004*.

Type: a)☒ Telephonic b)☐ Video Conference
c)☐ Personal [copy given to: 1)☐ applicant 2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes e)☒ No.
If Yes, brief description: *N/A*.

Claim(s) discussed: *N/A*.

Identification of prior art discussed: *N/A*.

Agreement with respect to the claims f)☐ was reached. g)☐ was not reached. h)☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *Applicant elected claims 1-9, 30, 33 without traverse in response to a restriction requirement*.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

_____
Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claim(s) 1-18, 30, 31, 33, 34, 36 are drawn to an image input apparatus used for correcting offset components in the signals output from photoelectric conversion means, classified in class 348, subclass 341.

II. Claim(s) 19-29, 32, 35,36 are drawn to an image input apparatus dividing the image into a reference area and at least one other area and adjustment of the signal levels in the at least one other area to be equal to the signal of the reference area is classified in class 348, subclass 262. The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as an image input apparatus by dividing the image into a reference area and at least one other area. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. The applicant is informed that in the event that the claims 1-18, 30, 31, 33, 34, 36 are elected, the Applicant must further elect one of the following species:

Species I directed to correction of offset fluctuation; claims 1-9, 30,33.

Species II directed to correction means wherein the signals during image information acquisition and from period other than image information acquisition; claims 10-18,31,34,36 Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, none of the claim is generic.

4. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added.

An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

5. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. Claims 10-29, 31, 32, 34-36 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a different group, there being no allowable generic or linking

claim. Election was made **without** traverse in a telephonic interview dated 04/12/2004. Group 1, Specie 1 directed to correction of offset fluctuation was elected (Claims 1-9, 30, 33).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Nabeshima et al. (US Patent # 6,330,083).

[Claim 1]

An image input apparatus (figure 1) comprising:

photoelectric conversion means (figure 1: 6) for acquiring image information of an object and outputting signals (col. 5 lines 12-16); and

correcting means (figure 2: 28) for and correcting offset components contained in the signals output from said photoelectric conversion means components (figure 1: 6), wherein said correcting means adjusts a fluctuation of the offset components generated during acquiring image information (col. 11 lines 6-14) [The offset components are corrected during a read operation which occurs when the image information is being acquired].

[Claim 2]

An image input apparatus according to claim 1, wherein said photoelectric conversion means acquires the image information of the object from a plurality of divided areas (figure 6A: 51) and

outputs the signal from each of a plurality of output units (Figure 6A: 52 and 53) corresponding to each of the plurality of divided areas (col. 7 lines 1-6).

[Claim 3]

An image input apparatus according to claim 2, wherein the signals from the plurality of areas are read separately to right and left directions respectively (Figure 6A disclose the charges being read separately to right and left directions).

[Claim 30]

Claim 30 is a method claim corresponding to apparatus claim 1. Therefore, claim 30 has been analyzed and rejected as previously discussed with respect to claim 1.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nabeshima et al. (US Patent # 6,330,083) as applied to claims 1 and 2 above and further in view of Nakamura et al. (US Patent # 5,289,286).

[Claim 4]

Nabeshima teaches the limitations of claim 1 but fails to teach "wherein the offset components include a level difference of the signals between the areas output from the plurality of divided areas". However Nakamura teaches that it is well known and used in the art to have offset components which include a level difference of the signals between the areas output from the

plurality of divided areas (col. 12 lines 51-58, figure 14). Therefore taking the combined teachings of Nabeshima and Nakamura it would have been obvious to one skilled in the art at the time of the invention to have been motivated to incorporate wherein the offset components include a level difference of the signals between the areas output from the plurality of divided areas. The benefit of doing so would be to make a correction between the offset and the reference output voltage line as taught in Nakamura (col. 12 lines 56-58).

5. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nabeshima et al. (US Patent # 6,330,083) as applied to claim 1 above and further in view of Barron et al. (US Patent # 5,659,355).

[Claim 5]

Nabeshima teaches the following:

An image input apparatus according to claim 1, wherein said correcting means includes: calculating means for calculating the fluctuation of the offset components in accordance with the signal output from said photoelectric conversion means during the image information acquiring (col. 11 lines 6-14). Nabeshima fails to teach subtracting means for subtracting the offset components from the signal output from said photoelectric conversion means and adjusting means for adjusting the offset components to be subtracted by said subtracting means, in accordance with an output signal from said calculating means. However Barron teaches that it is well known and used in the art to have a subtracting means (figure 2: 16) for subtracting the offset components from the signal output from said photoelectric conversion means (col. 3 lines 37-44); and adjusting means for adjusting the offset components to be subtracted by said subtracting means, in accordance with an output signal from said calculating means (col. 3 lines

61-62, col. 4 lines 1-11). Therefore taking the combined teachings of Nabeshima and Barron it would have been obvious to one skilled in the art at the time of the invention to have been motivated to incorporate subtracting means for subtracting the offset components from the signal output from said photoelectric conversion means and adjusting means for adjusting the offset components to be subtracted by said subtracting means, in accordance with an output signal from said calculating means. The benefit of doing so would be to obtain quickly a very accurate black level value that can be fed back into a loop to correct image signals as taught by Barron et al. (col. 2 lines 10-12).

[Claim 6]

An image input apparatus according to claim 5, wherein the offset components are a signal output from said photoelectric conversion means during a period other than the image information acquiring (Barron, col. 3 lines 49-51 figure 3: video from t1 to t2), and contain an average value obtained through addition of signals of the areas and averaging thereof (Barron, col. 3 lines 14-17).

[Claim 7]

An image input apparatus according to claim 5, wherein said calculating means calculates an average value of signals not obtained through photoelectric conversion (Barron, col. 3 lines 14-17 disclose calculating the average value of the black pixels which are by definition not obtained through photoelectric conversion).

[Claim 8]

An image input apparatus according to claim 7, wherein the signal not obtained through photoelectric conversion means includes a signal in a non-image pixel portion (Barron, col. 3

lines 14-17, disclose calculating the average value of the black pixels which are by definition not obtained through photoelectric conversion. Col. 3 lines 48-52, figure 3 further disclose that these signals are obtained during the time video line is invalid i.e. during a non-image pixel portion).

[Claim 9]

An image input apparatus according to claim 5, wherein adjusting the offset components by said adjusting means is executed during the period image information acquiring (Nabeshima, col. 11 lines 6-14).

6. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nabeshima et al. (US Patent # 6,330,083).

[Claim 33]

Claim 33 is similar to claim 1 except a storage medium, which is used for storing a code for correcting offset components contained in the signals output from said photoelectric means. Official notice is taken of the fact that it is well known in the art to have a storage means for storing a code and in order to transfer the code to any other image input apparatus.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

i. Horikawa (US Patent # 4,985,629).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K Aggarwal whose telephone number is (703) 305-0346. The examiner can normally be reached on M-F 9:00AM-5: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary examiner, Vu Le can be reached (703) 308-6613. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

YKA
April 29, 2004

VU LE
PRIMARY EXAMINER